

**White-tailed Deer in Indiana's State Parks:
has the control program worked and what is it's
future**

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Brown County State Park 1992

Brown County State Park
deer waiting for handout



White-tailed deer
in poor condition
due to habitat
condition



Sample site in Brown County State Park and Yellowwood State Forest showing difference in understory plants, 1993

Brown County State Park



Yellowwood State Forest



Exclosure placed in burned area in BCSP in 1988--picture taken in 1993



Brown County State Park Exclosure 1993





INDIANA STATE PARKS

Studies of habitat damage were initiated in Brown County in 1993							
and expanded to additional parks from 1995 to 2000							
Habitat damage was used to initiate deer reduction in each park							
Removal of white-tailed deer from Indiana state parks							
Year		Number of parks			Number of Deer		
1993		1			392		
1994		0					
1995		4			1422		
1996		7			1907		
1997		10			2430		
1998		9			1534		
1999		11			1599		
2000		15			1697		
2001		13			1483		
Seventeen parks have had two or more years of reduction							
Five parks have not had a reduction							

Brown County 2001



Brown County 1993



Brown County 2001



Vegetative growth outside exclosure is now 4 to 6 feet in height

Most parks now have 20x20meter exclosures to monitor recovery of habitat

Recommended program for maintaining white-tailed deer within the habitat carrying capacity of state parks and nature reserves

- As the program moves into the maintenance phase and park habitat recovers, it is important to establish a procedure for the long-term maintenance of deer populations within the capacity of their habitat. Vegetative condition will not be a good indicator of deer number in the maintenance phase.**
- Data on the number of deer removed from parks is correlated with the number of deer remaining within each park and with recovery of habitat. Parks that have had several years of reduction, have removals approaching 0.20 R/E (reduction per effort) and 12-16 deer/square mile of park habitat. Habitat is recovering in these parks.**
- Deer have a great capacity to expand their population without repeated control and can double their population in two years without control. Therefore, parks should have a reduction at least every other year.**
- Therefore, the recommended program is to use the data collected for each park on deer removed in a given year to determine whether a park needs another reduction the following year. Any park in which the R/E exceeds 0.22 or the number of deer removed/ square mile of park habitat exceeds 16 should have a reduction the following year. Parks not having a deer reduction in a given year would have a reduction the following year.**
- Habitat recovery should be monitored though periodic assessment of vegetative condition, approximately every 3 to five years,.**

Current status of parks and recommended parks for deer reduction during fall, 2002								
Park		Year of	R/E		#/Sq Mi		Removal	
		Last Removal					in 2002	
Brown County		2001	0.22		9.9		No	
Charlestown		2001	0.21		14		No	
Indiana Dunes		2001	0.2		15.5		No	
Pokagon		2001	0.17		12.3		No	
McCormickCreech		2000	0.22		14.7		Yes	
Spring Mill		2000	0.2		10.7		Yes	
Shakamac		2000	0.23		16.4		Yes	
Potato Creek		2000	0.3		21.7		Yes	
Chain'o'Lakes		2001	0.48		42		Yes	
Clifty Falls		2001	0.17		32.4		Yes	
Harmonie		2001	0.43		38.1		Yes	
Lincoln		2001	0.38		24.6		Yes	
Shades		2001	0.27		22		Yes	
Tippecanoe River		2001	0.27		24.1		Yes	
Turkey Run		2001	0.28		18		Yes	
Versailles		2001	0.31		25.7		Yes	
Whitewater		2001	0.33		34.8		Yes	
Ft. Harrison		Some damage occurring should have a deer reduction in 2002						
		or 2003						
Oubache		Damage present--should have a deer reduction in 2002						
Prophetstown		Land purchase in process---reduction probably needed when comp						
Mounds & Summit Lake			Need more evaluation					